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TRENDS IN CERVICAL CANCER INCIDENCE IN UNIVERSITY OF PORT HARCOURT TEACHING HOSPITAL (UPTH), RIVERS STATE, NIGERIA.

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ABSTRACTS
The incidence of cervical cancer varies dramatically, both globally and within individual countries.This retrospective study was carried out to determine the trend in cervical cancer incidence in the University of Port Harcourt Teaching Hospital (UPTH) from 2007 to 2009, using the data collected from the Department of Anatomical –Pathology. A total number of 69 cases were reported. The incidence in age group 50-59 in 2007 (36.8%) and 2009 (33.3%) was the highest, the lowest incidence was in the youngest age group of 20-29 with 5% in 2007 and no case in 2009. In 2008 the age group 50-59 was the lowest having 11%, while age group 30-39 top the list with 20%. From 2007 to 2009 age group 50-59 (23.2%) have the total highest incidence while age group 20-29 (8.7.7%) had the lowest. Trend in the years (2007-2009) indicated that the highest number of reported cases of cervical cancer was in 2008 while the lowest number was in 2009 (50% and 21.7%) respectively. The present result indicates fluctuation in trends in the incidence of cervical cancer in UPTH. On the other hand the few number of cases reported may not be a reflection of low cervical cancer cases in the region but rather may indicate poor knowledge and a negative attitude to the utilization of cervical cytology service, which is associated with strong cultural and religious reasons and the non availability or at best poor information about cervical cytology screening could account for under-reporting of cases.
KEY WORDS: Trends, Cervical, Cancer, Incidence.

BACKGROUND

Women in developing countries are yet to extensively utilize the benefits of screening programs. An estimated 371,000 new cases of invasive cervical cancer are diagnosed world wide each year, representing nearly 10% of all cancers in women (Parkin et al., 1993). The incidence of cervical cancer varies dramatically, both globally and within individual countries (Laura et al., 2009).

Cervical cancer is an important cause of death throughout the world especially in developing countries. Reports of trends in cervical incidence from less developed countries are limited by poor data quality and inaccurate population estimation (Bailie et al. 1995). Cervical cancer is the second most common neoplastic disease affecting women second only to breast cancer (Franco et al., 2003).

Epidemiologic data have long implicated a sexually transmitted agent based specifically on the risk factors for cervical cancer, which include early age at first intercourse, multiple sexual partners, and a male partner with multiple previous sexual partners. Potential risk factors that remain poorly understood includes; oral contraceptive use, cigarette smoking, parity, familial history, associated genital infections, and lack of circumcision in the male sexual partner (Franco et al., 2003).

However consumption of fruit and fruit drinks lowers the risk of cervical cancer while vegetables, foods of animal origin, complex carbohydrates, legumes, or folacin-rish foods do not reduce the risk (Herrero et al., 1991).

Eighty five percent of a studied population in Nigeria demonstrated very poor knowledge and a negative attitude to the utilization of cervical cytology service. This is associated with strong cultural and religious reasons and the non availability or at best poor information about cervical cytology screening. The non existence of a national cervical cytology screening, the lack of political-will and funding, poor advocacy and poor manpower were identified as the cause of the continuous high prevalence of this preventable cancer in Nigeria (Ogun et al., 2006).

METHODS

This retrospective study was carried out using the data collected from the Department of Anatomical –Pathology, UPTH, over a period of three years from 2007 to 2009. Ethical clearance was granted by the authority of UPTH. The total number of reported cases for each year was noted and categorized into age groups. Data analysis was by use of Microsoft Excel Package.

RESULTS

There were 69 reported cases of cervical cancer between 2007 and 2009 in the University of Port Harcourt Teaching Hospital. The age, period and cohort effects on the incidence were examined; using age-period-cohort (APC) models (McNally *et al.,* 1997). The incidence rate has been on fluctuating side from 2007 to 2009 as well as the period incidence.

The incidence in age group 50-59 in 2007 (36.8%) and 2009 (33.3%) was the highest, while the incidence in the youngest group (20-29) in 2007 (5%) and 2009 was the lowest, having no case in 2009 (Table 1 and 3). In 2008 the age group 50-59 was the lowest having 11%, while age group 30-39 top the list with 20% (Table 2).

From 2007 to 2009 age group 50-59 (23.2%) have the total highest occurring cases while age group 20-29 (8.7.7%) had the lowest number (Fig 1, Table 4).

The result indicates fluctuation in trends in the incidence of cervical cancer in UPTH in the past three years.

Table 1 Distribution of Cervical cancer according to age in 2007

Age groups	No. of Cases	Percentage (%)
20-29	1	5
30-39	4	21.
40-49	2	10.5
50-59	7	36.8
60-69	2	10.5
70+	2	10.5
Unknown	1	5
Total	19	100

Table 2 Distribution of Cervical cancer according to age 2008

Age groups	No. of Cases	Percentage (%)
20-29	5	14
30-39	7	20
40-49	6	17
50-59	4	11
60-69	6	17
70+	5	14
Unknown	2	5.7
Total	35	100

Table 3 Distribution of Cervical cancer according to age 2009

Age groups	No. of Cases	Percentage (%)
20-29	-	-
30-39	1	6.7
40-49	2	13
50-59	5	33.3
60-69	3	20
70+	4	26.7
Unknown	-	-
Total	15	100

Table 4 Distribution of Cervical cancer according to age from 2007-2009

Age groups	No. of Cases	Percentage (%)
20-29	6	8.7
30-39	12	17.4
40-49	10	14.5
50-59	16	23.2
60-69	11	16
70+	11	16
Unknown	3	4.4
Total	69	100

Fig1

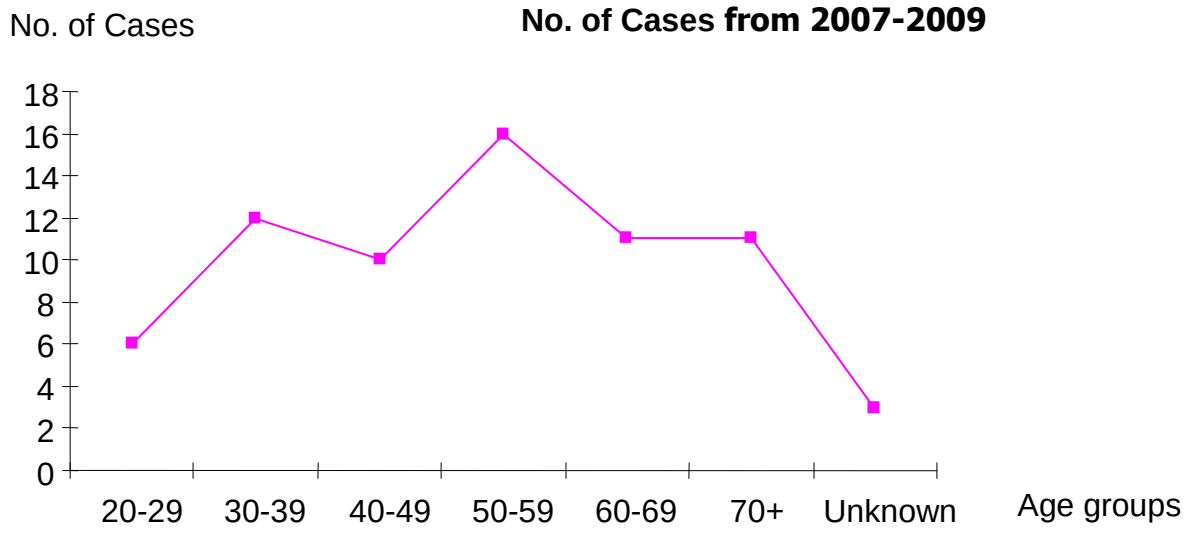
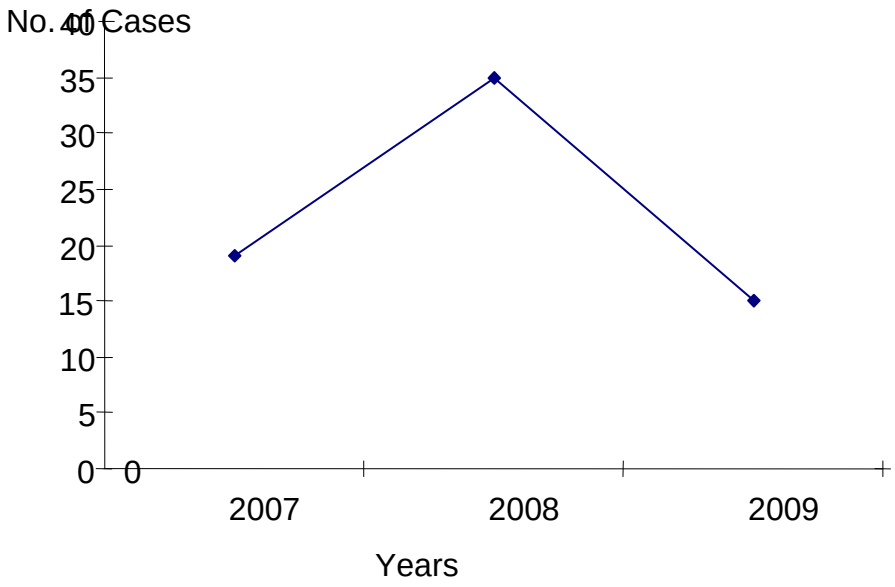


Fig 2; Chart Showing Distribution of Cervical cancer according to years



DISCUSSION

At every stage in life a woman in the third world risk some serous health problems, these include HIV/AIDS, high maternal mortality rate and cervical cancer (Ezem, 2007). Cervical cancer is the most common type of malignancy in women in most developing countries, and is the second most common form of cancer in the world (Franco *et al*., 2003).

The present findings indicate fluctuation in trends in the incidence of cervical cancer in UPTH on a yearly basis. The total highest affected age group was 50-59 (23%), and the total lowest affected age group was age group 20-29 (8.7%).This finding is consistent with observation in previous studies in Ibadan Nigeria (Delphine *et al.*, 2008) and Mauritius (Jeebun *et al*., 2009) in which the highest prevalence of cervical cancer was observed in the 50-59 years age group. Our finding is however at variance with a previous study in Zambia in which cervical cancers was more prevalent in the 35-44 years age group (Catherine, 2008) as well as in Spain where the peak incidencewas in the 25-29 age group (Delphine *et al*., 2008).

The study also found the highest number of reported cases in 2008 (50.7%) and the lowest in 2009 (21.7%). The few cases reported may not reflect low cervical cancer incidence in the region, but poor knowledge, cost (Obi *et al*., 2007) and a negative attitude to the utilization of cervical cytology service, which is associated with strong cultural and religious factors (Ezem, 2007) and the lack of available information about cervical cytology screening could account for underreporting (Aboyeji *et al*., 2004).

On the other hand the few number of reported cases may also be the result of improved enlightment campaign by government and non governmental organizations on risk factors that could lead to cervical cancer as well as the importance of early cervical screening in the last three years. Screening also reduces future treatment costs and enhances the quality of life of cancer patients.

Cervical cancer still remains a major cause of cancer death in women worldwide. Health authorities in developing countries should continue to improve on public enlightment. As this will not only deter promiscuity but reduce cervical cancer.

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